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ABSTRACT

As part of the preseminar materials for participants at a seminar on dissemination processes and effective schooling, the purpose of this document was to help the participants consider issues in the dissemination, utilization, and implementation of research on effective schools. The document comprises a series of quotes, excerpts, statements, models, analogies, metaphors, and questions on a number of issues. Among these issues are information dissemination and utilization, the dissemination practitioner, change strategies, the role of state education agency officials, educational planning, school improvement at the school and individual levels, educational change, the Research and Development Utilization Program, linkage and linking agents, and the technological, political, and cultural perspectives on innovation. A brief listing of additional resources is also attached. (RW)

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WHAT'S THE FIT?

DISSEMINATION PROCESSES and EFFECTIVE SCHOOLING

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PREFACE

This document is a part of the pre-seminar materials prepared for participants of the Dissemination Support Services Seminar on Effective Schooling and Dissemination Processes to be held in Chicago, October 12 - 14, 1982.

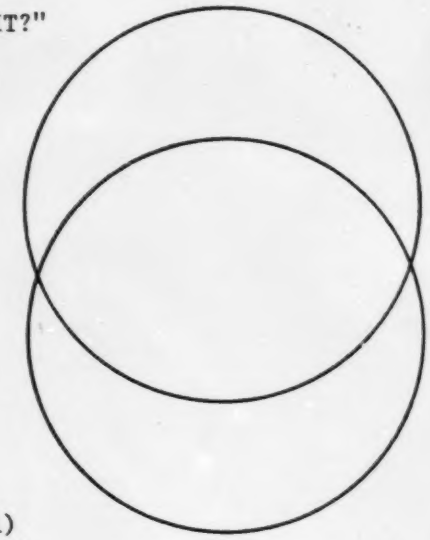
The purpose of the seminar is to provide members of the RDX staffs and their clients the opportunity to: (1) gain a clearer focus considering the implications of effective schooling research and resources, (2) share strategies for disseminating effective schooling research findings and resources, and (3) identify and explore key issues faced by the RDX in delivering effective schooling resources and research findings to their clients.

It is our hope that this document will serve as a tool, a thought provoking mechanism, for participants at the seminar as they become involved in considering issues of dissemination, utilization and implementation common to the service delivery community.

Joseph T. Pascarelli

DISSEMINATION PROCESSES and EFFECTIVE SCHOOLING:

"WHAT'S THE FIT?"



Researchers, at times, seem to act out the fable of the blind wise men who try to guess the identity of an elephant. Each wise man (or researcher) holds on to a different piece of the elephant, convinced that that piece is the key to the whole problem. Fortunately, researchers have the possibility of compensating for what is in their case not blindness but tunnel vision by backing off from their work and walking around the elephant to see what others are looking at.
("R & D Perspectives" Summer, 1982, p. 1)

In this non-traditional presentation of synthesized knowledge about dissemination processes, a variety of kernels of information (research findings, models, theories and perspectives) are assembled for the purpose of providing Seminar participants with an opportunity to "walk around" the issues of effective dissemination processes and effective schooling and begin to examine how these areas come together. This synthesis is not intended as a definitive piece: rather, the content is presented in a non-linear, non-sequential manner in order to evoke thoughts, responses and argument. The format of the document is such that the reader may add comments and additional information to the paper itself. As a result, it is our hope that from the cumulative reactions which reflect the depth of knowledge and experience which Seminar participants bring to the topic, will emerge a response to "DISSEMINATION PROCESSES and EFFECTIVE SCHOOLING -- WHAT'S THE FIT?"

Education at its highest level suffers from the same opiate that the Japanese perceived in our auto industry ten years ago. This was long range planning, or rather the lack of it. The American educational system is plagued by excessive fragmentation. We tend to treat parts of the total as if they were separate and unrelated. Think about the various trends in education over the past two decades. Remember the "individualized-activity-oriented" approach, "modular scheduling," "open concept schools," and a host of other specialized methodologies? Working within our school systems we concentrate on differences, sub-characteristics, specialties, and authorities. In other words, we tend to tinker with pieces of a whole.

But there is another way. If the system of education could redefine its job or goal to focus on results, it could gain commitment for a purpose that could be understood and pursued by all. This purpose will never be understood by all until a structure is built which is based on incentives that promote trust, honesty, and subtlety. ("Managing Our Schools for Effective Learning." J. Davy and L. Bramblett, p. 29)

"Practical experience and an understanding of system theory tell us that the problems facing schools must be treated systemically. The major barriers to local school change and improvement are not related solely or even primarily to awareness of alternatives, but to an organizational or human inability to implement needed improvements." (Rubin, 1978, cited by C. Mojkowski, p. 65)

"It appears that current theories of school improvement support a systematic approach of identifying needs, planning and installing a program to suit these needs, and then evaluating the implementation and impact of the program." (Bank, Snidman & Pitts, p. 107)

MODEL: THE EDUCATIONAL BUCKET BRIGADE
(Stedman, 1973)

(1) DIPPERS --- Synthesize past knowledge and translate it into knowledge that is useful to the client

(2) SHUTTLERS --- able to get the knowledge to the place where it needs to be applied, and

(3) THROWERS --- adept at the process of inserting (knowledge) into the local system.

.....(these) need not be 3 separate persons, but the roles are distinct and need to be thoroughly understood and demonstrated.....
(Clifford and Trohanis, p. 10)

WHAT CONSTITUTES AN EFFECTIVE "THROW"?

"The mere provision of information resources and materials constitutes a poor dissemination strategy, especially if the objective is utilization." (Emrich and Peterson, 1978, p. 41)

"Earlier, it was hoped that the distribution of knowledge and skills might be accomplished through a complex information dissemination system, such as ERIC or MEDLARS. Despite the energies of dedicated persons, such dissemination efforts have been only minimally helpful. (Gedeonse, 1969) *They certainly cannot be accused of generating visible educational change."* (Clifford and Trohanis, p. 5)

"The dissemination strategies of the early federal government-sponsored projects employed printed material, ERIC information, replicable R & D products, and audiovisual materials. Evaluations of these strategies have made it clear that they have been generally successful; their lack of impact is documented in a survey completed by the Bureau of Social Science Research in 1968 - 1969 (Office of Education, 1969)." (Adrianne Bank, Nancy C. Snidman & Marcella Pitts, p. 95)

WHO MAKES UP THE "LOCAL SYSTEM"?

WHO IS TO "CATCH" WHAT WE "THROW"?

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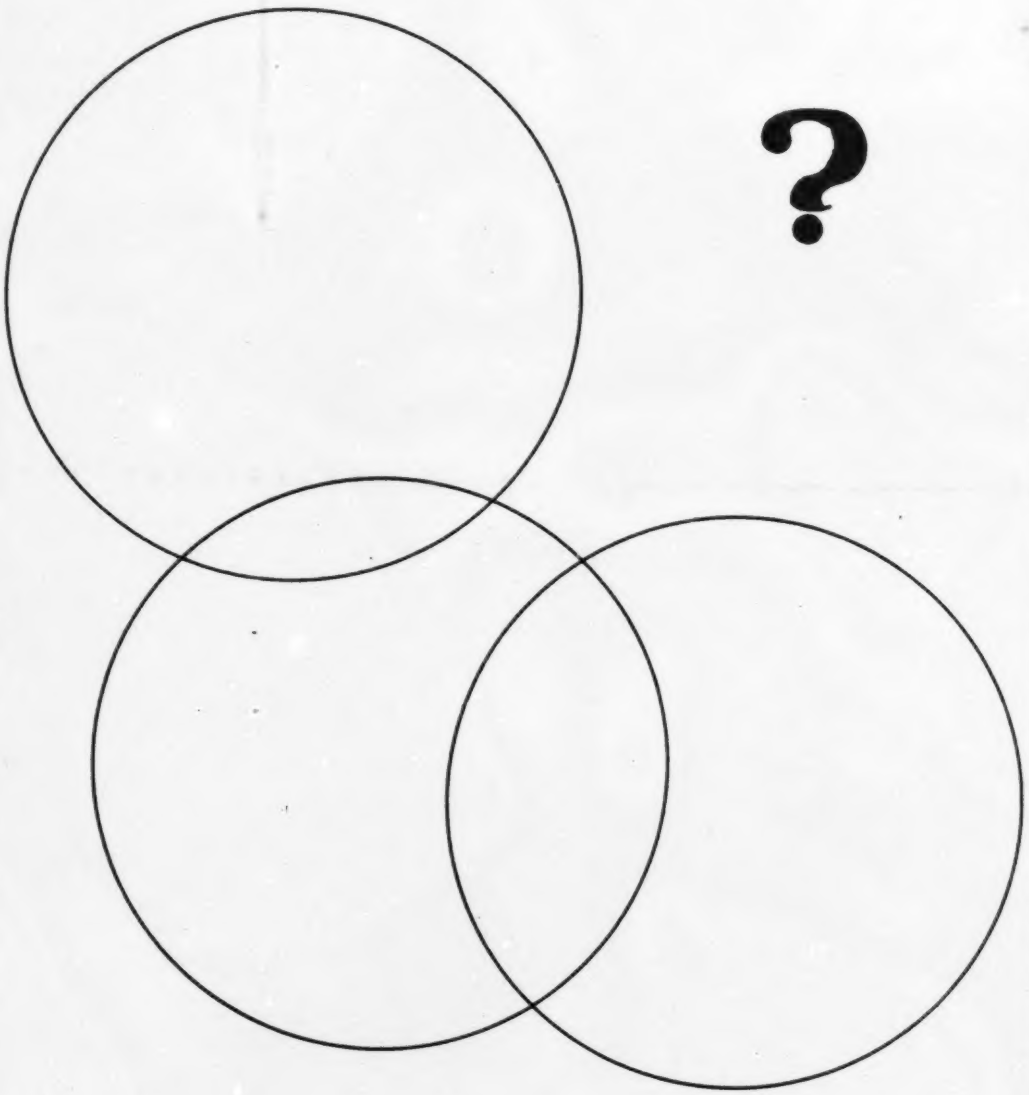
MODEL: THE PRACTITIONER -- RATIONAL MAN, COOPERATOR, POWERLESS FUNCTIONARY?



(See next two pages.)

"IMAGES OF THE PRACTITIONER AND STRATEGIES
OF EDUCATIONAL CHANGE"
(Sam Sieber 1972)

FIGURE 1
STRATEGIES FOR INDUCING EDUCATIONAL CHANGE BASED ON IMAGES OF THE PRACTITIONER

	1.	2.	3.	4. Efficiency		
Image of the Practitioner	Locus of Change	Channel of Influence	Change-Agent	(a) Effort	(b) Coverage	(c) Yield
The Rational Man	Internal-Intellective	One-way Communication	Lecturer Writer Public Critic	Small	Wide	Small
The Cooperator	Internal-Affective (attitudinal)	Two-way Communication	Consultant Human Relations Expert Field Agent	Moderate	Very Limited	Moderate
The Powerless Functionary	External-Structural	Prescriptions and sanctions (orders, laws, regulations)	Legislator School Board Administrator Pressure Group	Great	Wide	Moderate

The Combined Strategy

This strategy is not wholly novel, for it entails a particular combination of elements found in the three strategies discussed on the preceding page. The images of the Rational Man, the Cooperator, and the Powerless Functionary each emphasize a different aspect of human behavior, and it is the task of a truly global strategy to handle all of these aspects in a coordinated fashion. The image of the Rational Man emphasizes the cognitive aspect of human behavior; the image of the Cooperator emphasizes the evaluative aspect; and the image of the Powerless Functionary emphasizes the prescriptive. Thus, it is assumed that the Rational Man will respond to statements about reality, or cognitions; that the Cooperator will respond to approval or disapproval, or evaluations; and that the Powerless Functionary will respond to orders, or prescriptions. The combined strategy is proposed, therefore, to reconstitute these different components of human action.

The essence of the approach is the combining elements of the Rational Man, Cooperator, and Powerless Functionary strategies. The main components which we have identified as being necessary for focused change are: rational (i.e., validated) information, two-way interpersonal communication and expertise in group processes, consensus on new norms and sanctions associated with a proposed change, legitimate authority of the person responsible for the innovation and the power to carry it through.

Change Agent or Agency

If we are to utilize information, interpersonal processes, and power, then quite obviously more than one type of person would be required to fulfill the role of a change agent. Perhaps what is needed is a national network of agencies composed of federal, state, and local officials, representatives of relevant segments of the non-legal ancillary structure, and experts in human relations, research and development, and communications. Each national agency might focus its attention on one area of innovation at a time so that resources and interests are not diffused. (It will be noted that we are proposing specialization by type of innovation, rather than by region as currently exemplified by the USOE Regional Laboratories.)

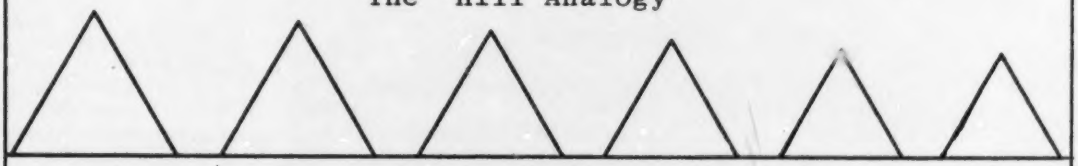
All of the change agents mentioned above would combine their efforts in bringing about the innovation. These efforts would entail new regulations or legislation, consultation and demonstration among schools, summarizations of research evidence, development of new educational products, mass communications among communities and school systems, and field work in interpersonal relations and group process. When a campaign centering on a particular innovation has been set into motion by lower echelon personnel working in regional offices, the top planners at each agency would reconvene and consider their next innovative thrust. If a number of agencies were coordinated at a national level, duplication of effort would be avoided and several campaigns could be carried on simultaneously without working at cross-purposes.

The regional or local agencies within this network might be made responsible for (1) carrying out the mandate of the national agencies, (2) supervising field agents, and (3) facilitating the emergence of "temporary innovators" in school systems.

These innovators would be given short-run authority for the inauguration of new programs in their own schools. (It often is pointed out that school personnel, unlike farmers, are restrained by the bureaucratic setting of education. We are proposing here that the bureaucracy be exploited rather than lamented--by the rotation of personnel in charge of innovative programs.)
(Excerpts from S. Sieber, pp. 365-383.)

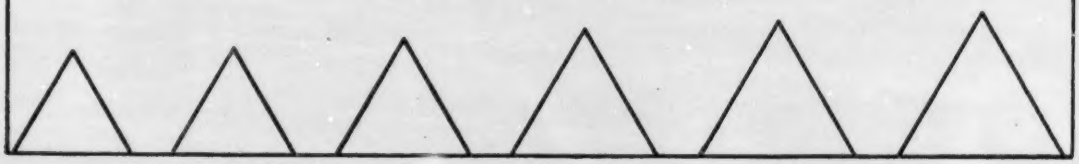
IS "SPECIALIZATION BY INNOVATION" A VIABLE EFFECTIVE SCHOOLING DISSEMINATION STRATEGY?

The "Hill Analogy"



The hill analogy, briefly, asserts that movement in the development of a program is difficult as one goes up the developmental hill, but, having reached near the summit of the hill, the implementation process becomes easier. Thus, where a state is in terms of its acceptance of dissemination as a tool in the school improvement process or in the business of the SEA (i.e., its philosophy toward dissemination and school improvement) and the structures already in place relating to the dissemination system, will exert an influence upon the success and the timing of that success in achieving educational improvement objectives. The higher up the hill (i.e., the more developed), the more quickly the dissemination objectives will be achieved. An SEA's placement on the hill can change quickly, as when a strongly supportive top-level SEA administrator leaves the agency or when an individual with previous experience in capacity building in another state moves to a new location. And there may be more than one "hill"; that is there may be a "hill" for the resource base, for linker systems, for acceptance of dissemination by SEA administrators, and so forth.

(Vol. I, pp. 4-48, 49, Building Capacity for Improvement of Education)



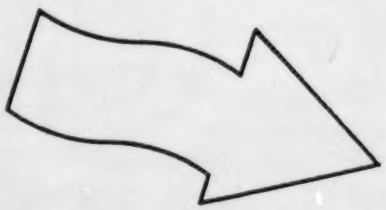
How do SEA officials view dissemination? Three administrators from one SEA are cited as follows:

"Dissemination is valued, but not necessarily more so than other programs seen as critical that compete with dissemination for resources." "Education is not yet a knowledge based profession. Organizational decision making (in schools, school districts and the SEA) is political. We can survive without a dissemination system, but we will still be in a relative state of ignorance."

A program administrator who had successfully worked with SCBP staff and clearly recognized the value of SCBP services expressed concern that the ultimate users -- LEA personnel -- probably did not sufficiently value a dissemination capacity. (Building Capacity for Improvement of Education, Vol. I, pp. 4-38,39)

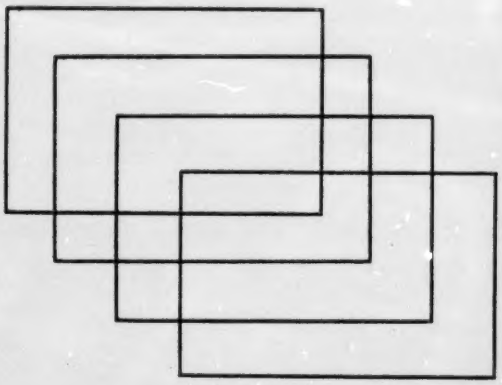
HOW CAN DISSEMINATION OF EFFECTIVE SCHOOLING R&D STRENGTHEN EXISTING SEA/LEA CAPACITY FOR KNOWLEDGE UTILIZATION?

HOW DO DIFFERENT PERSPECTIVES AND PROCESSES OF PLANNING AFFECT DISSEMINATION STRATEGIES?



PLANNING: A METAPHORIC PERSPECTIVE

Exerpts from: NEW PERSPECTIVES ON PLANNING IN EDUCATIONAL ORGANIZATIONS



Four Metaphoric Frames for Planning

A metaphor is the likening of two things that are not the same. The comparison sometimes has the effect of highlighting aspects of the things compared that were not previously perceived or thought interesting. A metaphor also proposes that one thing might be treated as if it were another; it suggests that the "logic" or structure of one "side" of the metaphor somehow parallels that of the other. The following four metaphors[1] suggest four alternative frameworks for goal-independent planning. Each implies a different answer to the question, "What is planning supposed to do?"

[1]The author labels these "quite frankly speculative, personal, and somewhat whimsical."

1. Planning as a vision-testing.

optometry: The practice or profession of testing the eyes for defects in vision in order to prescribe corrective glasses.[2]

If we all filter information through a set of limiting beliefs and assumptions, then an optometrist-planner might provide a useful periodic check of the "lens" through which members of an organization make sense of activities. The planner could organize the search for flaws or inadequacies in present beliefs and assumptions, and could also help generate alternative assumptions that precipitate a different set of activities.

This metaphor assumes that the basic issue of planning is whether or not accepted tacit assumptions about the nature of an organization will limit members in their responses to future situations. Planning in this mode is mostly likely to be undertaken in support of future decision making. Planning is used to allow early reaction and to generate alternative ways of acting.

Examining "lenses" can also reveal the beliefs behind members' opinions about what the organization can do next. Disagreements over policy options may be resolved more easily if they are seen as arguments not about what to do, but about different assumptions concerning what is or will be (Mason, 1969). The optometrist-planner may be able to diffuse an antagonistic climate by clarifying the different frameworks assumed by protagonists.

[2]This and subsequent definitions are selected and edited from The Random House Dictionary, Unabridged Edition, 1966.

2. Planning as matchmaking.

marriage: any close or intimate association.

The planner may play the role of the skilled matchmaker who tries to understand the characteristics of an organization and then suggests one or more potential "mates." The matchmaker-planner leads the organization to ask, "What are the best traits of this organization?" "Who in the environment will most value these traits?" and "Who can live with our shortcomings?" It may also be necessary to ask, "How can we present the organization in the best light to those with whom association must be maintained?"

This metaphor leads to a more active role for the planner. In choosing a matchmaker image, the planner is assuming that the basic task of the planning process is to improve the alignment of the organization (or sub-units of the organization) with what are sometimes called "external stakeholders." The metaphor focuses on the political, support-garnering function of planning. Within the organization, matchmaking can also help with the semi-political task of uniting sub-units in common pursuits. The planner aims to find stable matches that build on positive traits and avoid the incompatibilities that might lead to untimely divorce.

3. Planning as physical education.

fit: adapted or suited; qualified or competent; prepared or ready; in good physical condition.

It may be useful to look at organizations as being in training for demanding sport. The planner-coach encourages the aspiring athlete/organization to evaluate performance to date, and sets up additional "training routines" to develop specific skills. The planner-coach helps decide who should hold down what position, helps identify the additional talent needed, spends extra time with the manager, and -- perhaps most importantly -- keeps an eye on successful tactics employed by the competition.

IS UTILIZATION OF EFFECTIVE SCHOOLING R&D A "FITNESS" ISSUE?

The key question in this process is, "What does this organization need to develop so that it can maintain and improve its performance?" The planner-coach takes as central an issue perceived to be less problematic in the preceding two metaphors--the question of how to improve skills. S/he hopes to create the underlying attitude that just staying in shape demands steady exercise, while improvement requires experimentation and continuous analysis of performance.

4. Planning as counseling.

sense: the meaning, reason or value of something; an opinion or judgment formed or held, especially by an assemblage or body of persons: "The sense of a meeting."

As Karl Weick (1979) has said, "How can I know what I think until I see what I say?" Planners might be most useful if they would just concentrate on providing occasions for people to "see what they say." Uniting this idea with a counseling metaphor suggests that the planner might devote him/herself to the creation of low-threat, non-judgmental planning situations in which organization members can express themselves freely. The planner-counselor might especially encourage members to talk about what in the organization they do not understand, in the hope of gradually finding a more appropriate frame (Watzlawich, Weakland, and Fisch, 1974) for making sense of events. The basic questions of this mode are, "What is confusing about our present activities?" and "Can we 'reframe' our situation in ways that will increase understanding and allow us to act more effectively?" The overall issue is how to invest the organization with a greater sense of coherence and mission. Planning can be designed to clarify a pattern in present activities that can help guide future choices. Such planning may also improve the ability of the organization to present its activities more coherently to outsiders (Ann Huff, pp. 35-37).

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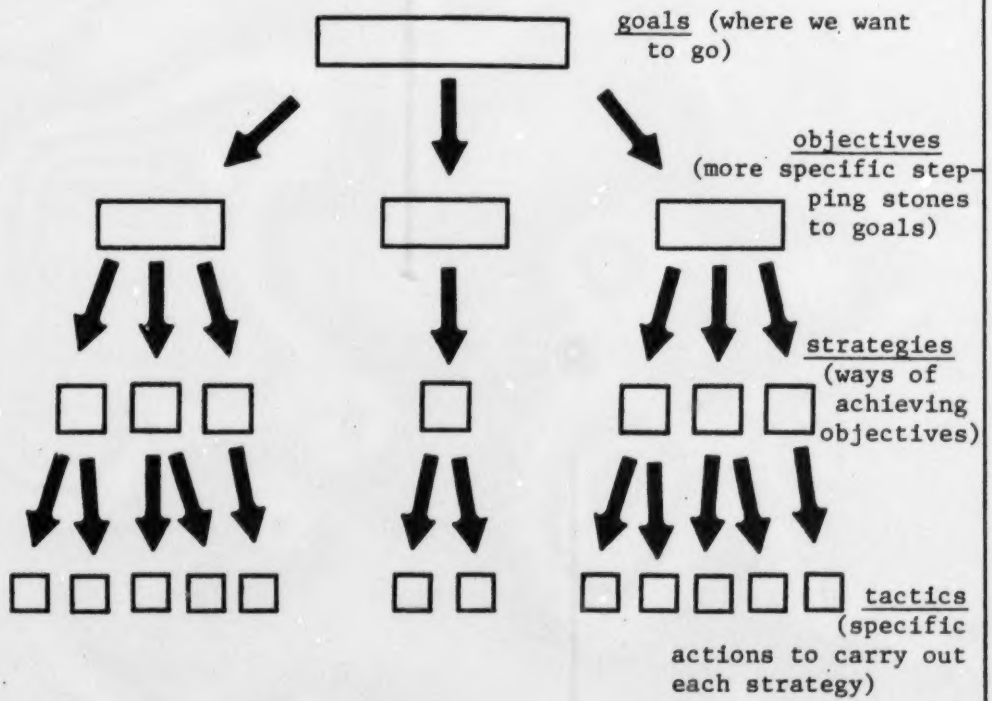
DOES IMPLEMENTATION OF EFFECTIVE SCHOOLING FINDINGS IMPLY ONE PLANNING MODEL OVER ANOTHER?

TIMING AND SEQUENCING THE PLANNING PROCESS -- FOUR MODELS OF HOW THE PROCESS OF PLANNING MIGHT BE MANAGED.

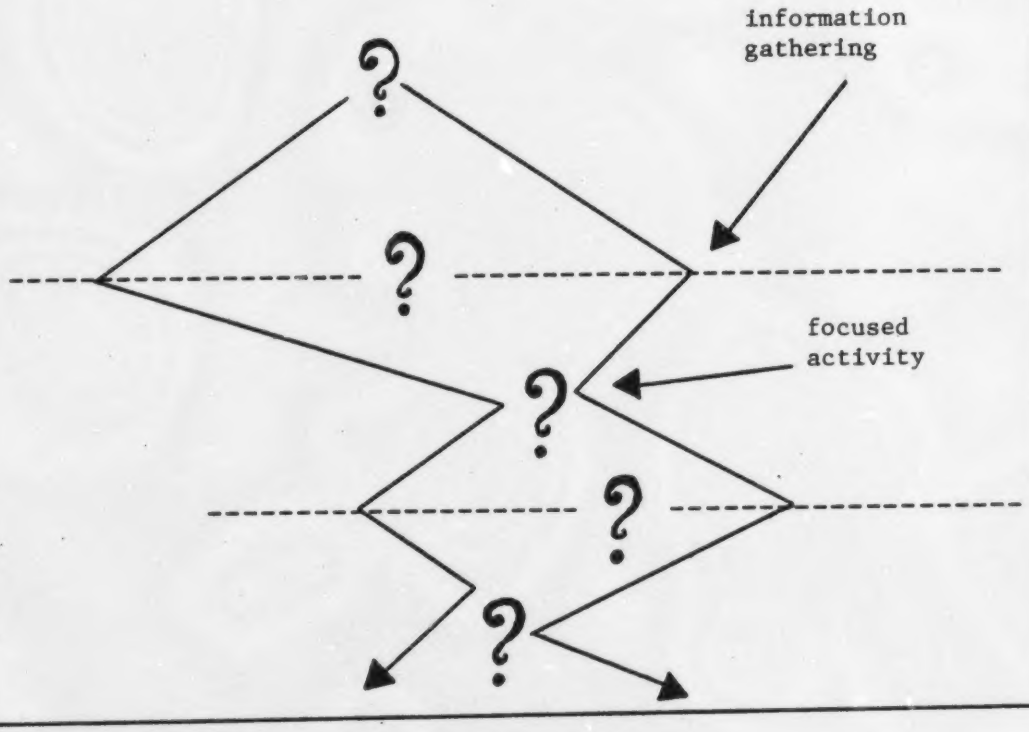
1. THE RATIONAL PROCESS

(A GOAL-BASED IMAGE OF PLANNING) AT THE HEART OF THE GOAL-ORIENTED MODEL IS A PYRAMIDAL SEQUENCE OF ACTIVITIES. THE SEQUENCE IMPLIED BY THIS APPROACH IS:


goals (where we want to go)
objectives (more specific stepping stones to goals)
strategies (ways of achieving objectives)
tactics (specific actions to carry out each strategy)

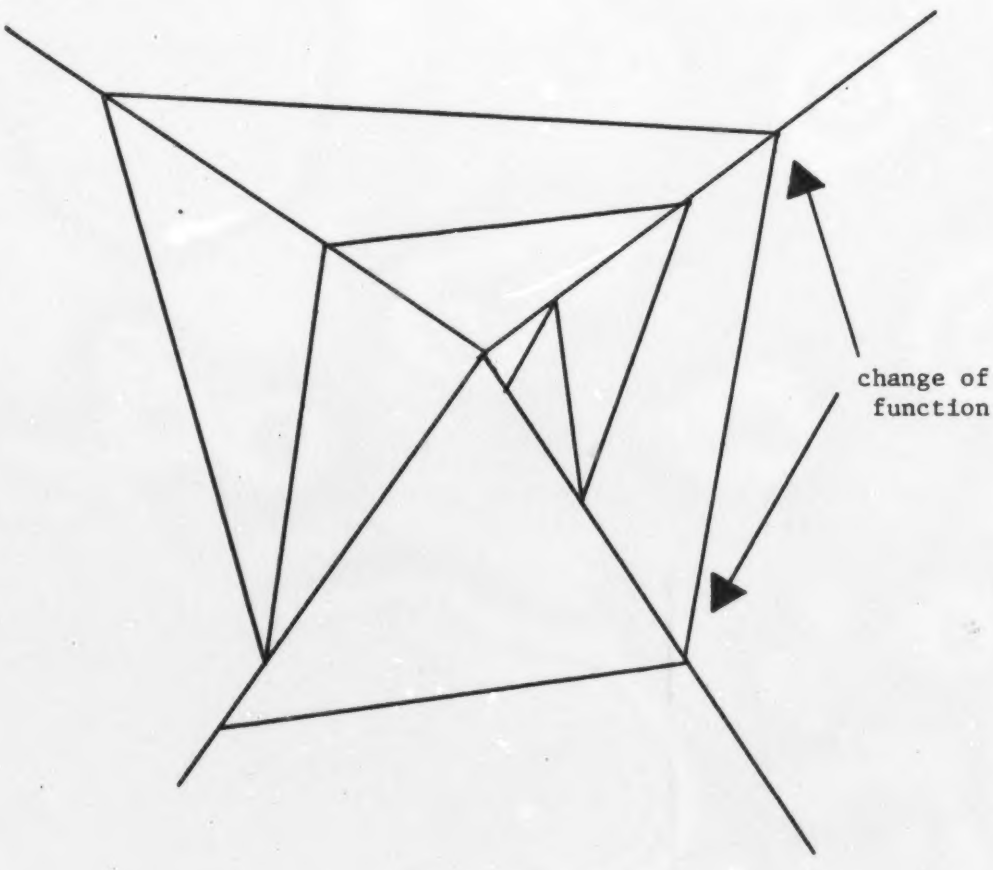
2. THE ACCORDION PATH

THE PROCESS OF PLANNING MAY BE PRODUCTIVELY VIEWED AS THE ALTERNATION OF DIVERGING AND CONVERGING ACTIVITIES. THE PLANNER IS CONSTANTLY DECIDING WHETHER TO VIEW THE ORGANIZATION IN A BROADER CONTEXT (IN ORDER TO INCREASE UNDERSTANDING) OR MORE NARROWLY (TO FOCUS ON THE MOST IMPORTANT OR WORKABLE ASPECTS OF SPECIFIC PROBLEMS). OVER TIME, BOTH DIVERGING AND CONVERGING (OR SCANNING AND FOCUSING) ACTIVITIES ARE NECESSARY. EACH DIVERGING OR CONVERGING ACTIVITY IS LIKELY TO ALTER THE WAY THE ORGANIZATION IS VIEWED, SO THAT THE PATTERN OF ACTIVITY MIGHT BE THOUGHT OF YIELDING A <u>CROOKED</u> ACCORDION PATH LIKE THIS:



3. THE SPIDER WEB

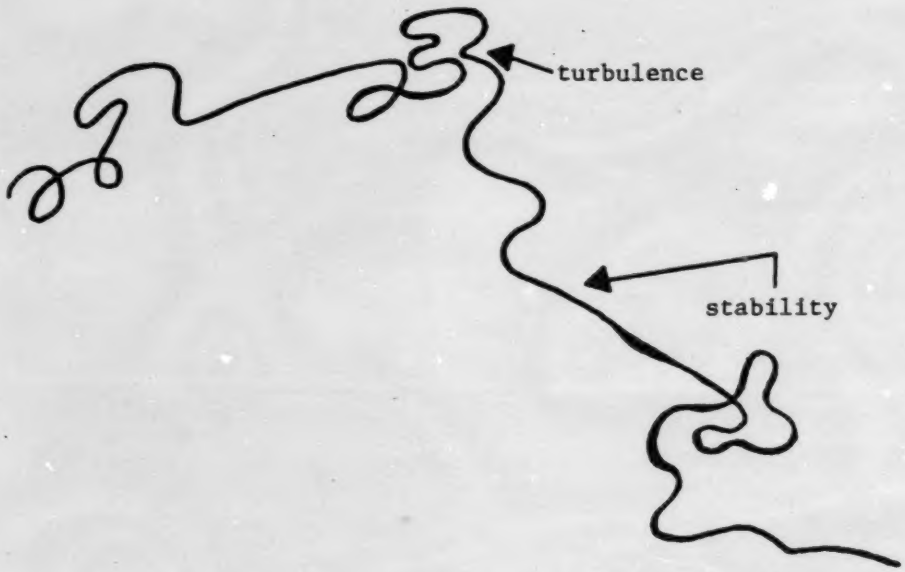
AS WE ADMIT MORE AND MORE FUNCTIONS UNDER OUR DEFINITION OF PLANNING, IT BECOMES LESS AND LESS LIKELY THAT ALL OF THEM CAN BE ADDRESSED AT ONCE. THE PLANNER MIGHT CONSIDER SEQUENCING ACTIVITIES SO THAT A VARIETY OF ASPECTS OF PLANNING ARE ADDRESSED SOONER OR LATER. THIS VIEW CAN BE DEPICTED AS A COCKEYED SPIDER'S WEB: (Huff, pp. 42-45)



4. THE KNOTTED STRING

FROM A LONGER TIME PERSPECTIVE, AS MINTZBERG (1978) ARGUES, AN OPGANIZATION CAN BE SEEN AS ALTERNATING BETWEEN FAIRLY STABLE, PREDICTABLE ERAS AND OCCASIONAL PERIODS OF DOUBT, CONFUSION, AND INCONSISTENT ACTIVITY. DURING A TURBULENT PHASE, THE PLANNER MIGHT BEST AS... "IS THIS A TIME TO SCHEDULE PLANNING ACTIVITIES THAT MAY LEAD TO A RADICAL RECONCEPTUALIZATION OF SOME ASPECT OF THIS ORGANIZATION'S WORK?" DURING A STABLE INTERVAL, A MORE APPROPRIATE QUESTION WOULD BE: "IS THIS THE TIME TO IMPROVE PERFORMANCE IN THE DIRECTION TO WHICH WE ARE PRESENTLY COMMITTED?" THIS VIEW OF SEQUENCING MIGHT BE DEPICTED AS A STRING THAT OCCASIONALLY LIES KNOTTED BACK UPON ITSELF.

(Ann Huff, pp. 42-45)



EXCERPTS FROM STUDY OF DISSEMINATION EFFORTS
SUPPORTING SCHOOL IMPROVEMENT

(David Crandall - as reported in R & E P Improvement Notes.)

Four approaches to school improvement were analyzed in the study:

- 3 emphasized dissemination of products and practices developed outside of user schools:
  - a. "face-to-face approach (National Diffusion Network)
  - b. "marketing" (Bureau of Educationally Handicapped)
  - c. state-administered dissemination (ESEA Title IV-C adoption-adaptation)
- 1 emphasized local development of new products and practices (Title IV-C Development projects)

"...like Abt's study of RDU, DESSI found that transfer of new practice is not just a matter of information but of persons as well. 'If you don't have face-to-face disseminators,' asserts Crandall, 'you're not going to get any implementation.' (p. 3)

"The most important thing for (disseminators) to know...is how different the new practice is from the current practice...the scope of change being attempted is related to the success that can be expected and to the kinds of assistance that promote it." (p. 4)

"Two fairly independent processes seem to be at work in school improvement efforts. One results in change in classroom practice. The other results in organizational change and institutionalization of new classroom practice. External agents need to be aware that different behaviors influence different processes and produce different outcomes. In a global sense, the help that external agents provide is instrumental in producing organizational change, and organizational change is the only way in which you get institutionalization of new practice. If you look at the ways in which external agents spend their time, a lot of it is in front-end activities -- coordinating awareness sessions, selling school committees, enlisting administrators' support, and so on. That's fine if organizational change is the outcome that you want to promote, but it does little to promote change in classroom practice, and unless you have that, you have nothing to institutionalize."
(Crandall, p. 4)

What are the implications for R&D on effective schooling when both organizational and classroom level changes are desired?

Using data from study sites where use of new practice required major change, DESSI researchers constructed two complementary models of the school improvement process. Both models relate key actors in context. In successful school improvement efforts, change takes place at two levels and has different effects at each.

SCHOOL-LEVEL MODEL

- Strong principal leadership produces organizational change, and organizational change is prerequisite for institutionalization of new practice.
- Since readiness is directly related both to change in individual teachers' mastery of new practice, larger districts and smaller schools provide the ideal context.
- Principals, not teachers, are the critical link to school-level outcomes.
- At the school level, improvement is visible as organizational change and as institutionalization of new practice. Since school and district size seem to affect the process in important ways, they figure prominently in the school-level model.

INDIVIDUAL-LEVEL MODEL

- At the individual level, success in school improvement efforts is visible as change in teachers' classroom behavior.
- Three factors seem to explain most of teachers' perception of gains resulting from mastery of new practice: the amount of change achieved, assistance received from the principal, and assistance received from outsiders. As these three factors increase, so does teachers' perception of gains.
- External agent assistance best contributes to organizational change, and it detracts from change in individual teachers' classroom behavior, except when it is focused on the specifics of implementation. Assistance from local facilitators, however, seems to encourage teachers to change classroom behavior. (p. 4-5)

I M P L I C A T I O N S —

" Initially, external agents should work with a local facilitator, who will do most of the groundwork with teachers, usually in concert with a selected principal. In order to bring about teacher outcomes, external agents should spend considerable amounts of time providing follow-up assistance and working out procedural details for classroom use of the new practice. They should play down contact with administrators when working with teachers. However, to bring about organizational change after teachers are successfully involved with the new practice, external agents should spend time making personal contacts with administrators and seeking commitment from administrators and local school boards." (p. 5)

Change (as viewed from the Concerns-Based Adoption Model) is seen as a process rather than as an event. All too frequently in practice and in the conceptions of many change models, change is viewed as an event or decision point (e.g., an "adoption decision"). From the CBAM perspective heavy emphasis is placed upon the fact that change is a process, a process that takes time to unfold. Change is not accomplished by the simple passing of a law, by a decision maker making an announcement in the fall faculty meeting, sending a memo, or holding a two-day preschool workshop.

A second major assumption is that change is made by individuals, although group and institutional variables must be considered. However, an emphasis in the CBAM is placed upon describing and understanding what happens to the individual. Without a change in individuals, it is not likely that an organization will be able to initiate, maintain or institutionalize a change.

For those individuals, change is a personal experience. There are personal feelings, needs and perceptions that are a part of the change process. To understand and facilitate change, attention must be given to this personal dimension of the process.

Fourth, we believe that change entails developmental growth in terms of the individual's feelings about the innovation and skill in using the innovation. An individual is not one day completely naive in relation to use of an innovation and the next day an instantaneous expert and highly sophisticated user. Rather, there are developmental levels and stages that the individual may progress through as they become increasingly confident and competent in use of the innovation. (Hall, 1979, pp. 2-3)

Our experience in the related change literature clearly established that meaningful change will require changes in the institutional norms, beliefs, and patterns, as well as changes in the individual behaviors of all the folks that frequent the institutional setting. That is why, it seems to me, that we have to address the whole of the school because at some times you are going to need to move on making adjustments in institutional patterns. At other times you are going to have to work in the area of technical training, providing additional skills to individual teachers to try to change their behavior in the classroom and in the school. That also goes for the principal. (Lezotte, 1982, p. 5)

Effective staff development programs should be predicated on the assumption that change is a process and not an event. Change is iterative and incremental. That says two things: One, that one-shot experiences are probably not going to be effective in 90 to 95 percent of the cases; and two, if people go into a change and improvement program knowing and believing that it is a process and not an event, I think that it will help them to prepare for the frustrations and setbacks that are likely to be encountered along the way. (Lezotte, 1982, p. 5)

It should be recognized that great variation exists in the extent and type of research upon which the characteristics of effective school learning climates are based. There is extensive research that demonstrates that the beliefs and evaluations concerning students' ability to learn, and the expectations which teachers hold for students, are highly related to the level of student achievement. Similarly, there is an extensive body of research to support the conclusion that student achievement is related to the amount of engaged time devoted to learning....

There is some evidence that changes in schools in the direction of developing characteristics that are identified here do result in improved levels of student achievement, but definitive studies remain to be done. We cannot, therefore, categorically say that the kinds of school learning climate outlined...cause high achievement. However, there is an extensive body of correlational research which indicates that schools with certain characteristics have higher levels of student achievement than schools without these characteristics.

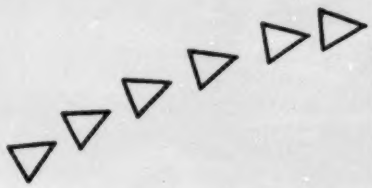
A further word of caution is appropriate concerning the characteristics of effective school learning climates. There is increasing evidence that some characteristics function differently in different school social systems.

...no single variable or characteristic of school learning climates explains teaching effectiveness. All of the characteristics identified are interacting aspects of the total social system; some specific characteristics may function differently in different schools. (Brookover, et.al., 1982, pp. 5-6)

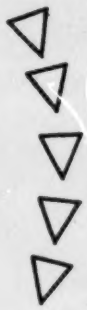
Excerpts from the Abt Study:

RESEARCH & DEVELOPMENT UTILIZATION PROGRAM
(A Program and Its Implications)

The Research and Development Utilization (RDU) program, a demonstration effort funded by the National Institute of Education, was designed to support dissemination activities leading to school improvement at the local level.



How should these terms be defined for effective schooling?



Dissemination, as used in the Abt reports, refers to activities that involve not only the spread of information by a central agency, but also a two-way process of matching the needs of a target population with a range of relevant resources and making those resources available to the population.

School improvement refers to activities occurring at the school and district level which result in increases in the effectiveness of teaching curriculum, or other aspects of the school systems' capacity to improve the quality of education for children. (p. 1)

The RDU strategy differed from other major federally supported school improvement efforts in that it emphasized voluntary involvement, offered small amounts of seed money funding, and emphasized provision of both technological and process/human support that would be responsive to local needs. (p. 2)

The RDU program represents an example of recent efforts to foster school improvement by disseminating elements of the cumulative knowledge base on <u>proven practices, processes and products</u> that resulted from investments in research and program development. As such, it is one of several recent programs (e.g., The National Diffusion Network, Follow Through, State Capacity Building Grants Program, Regional Exchange and Regional Services) which have been designed to help improve school practice by attempting to bridge the gap between the producers and

Viable strategies for effective schooling R&D include.....

potential users of new knowledge and information on effective schooling. Many of these programs involved the creation and support of networks of organizations and individuals (including national organizations, state departments of education, regional organizations, intermediate service agencies, schools and school districts), each playing an essential role in the dissemination and knowledge utilization process. Dissemination has increasingly come to be viewed as an important and effective mechanism for promoting school improvement. Not only have specifically designed dissemination programs come into being, but other school improvement programs now have within their mandate "dissemination" functions as well. (p. 2)

The RDU program is unusual among federally funded

dissemination strategies because of its dual commitment to the dissemination and use of R&D products and the development of local school capabilities to solve problems through the use of externally developed knowledge. Other federal programs have tended to concentrate on either dissemination of specific products or on building local capacity for planning and problem solving, but have not concentrated on an integrated model for combining the two.

Each project initially emphasized the use of field agents to assist local schools in using the network of external resources that was developed at the project level. Each project also developed a knowledge base, or pool of products or practices, that were screened for quality, availability and transferability. Finally, each participating school or district was provided

with assistance in following a sequence of problem-solving activities, which included:

- Systematic needs assessment or problem identification;
- examination of alternative solutions to the problem, focusing primarily on the products of educational R&D;
- selection of a specific solution to address the problem;
- implementation of the solution; and
- evaluation and incorporation of both the solution and the problem-solving process.

(p. 4)

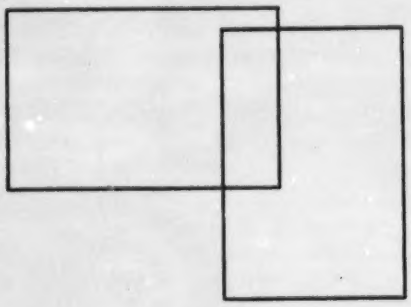
Will local educators assume that research on effective schools implies set solutions for all problems?

IMPLICATIONS —

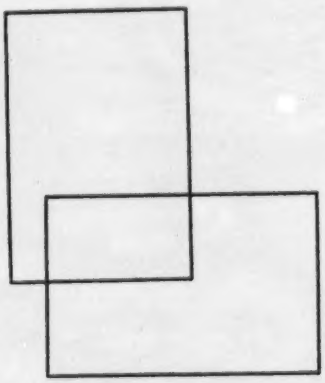
"The implication of findings from the Abt study is that a dissemination strategy can indeed have far reaching school improvement impacts even beyond the adoption and implementation of externally developed innovative products. The power of the intervention to produce positive benefits for local schools was even greater for some of the unanticipated, long-range effects of the program, such as organizational changes and staff development outcomes, than for the actual immediate goals of the program. Overall, there is evidence to suggest that particularly in times of shrinking resources, dissemination activities can be a highly efficient strategy for achieving multiple objectives simultaneously. Bringing together faculty and administrators to meet a particular curriculum need, and drawing on information resources outside the school district can be a mechanism for resolving organizational problems and meeting staff development needs at the same time.

LINKAGE

"A COMPREHENSIVE SCHOOL IMPROVEMENT PROCESS REQUIRES SOMEONE WITH 'FRONT-END' SKILLS WHO CAN LINK POTENTIAL ADOPTERS WITH EXISTING KNOWLEDGE; AND SOMEONE WITH 'BACK-END' SKILLS WHO CAN USE DATA TO DETERMINE HOW WELL THAT KNOWLEDGE, ONCE IMPLEMENTED, IS IN FACT IMPROVING TEACHING AND LEARNING. SCHOOL IMPROVEMENT IS A CONTINUOUS AND INTERACTIVE SEQUENCE THAT AN ADMINISTRATOR CANNOT MANAGE WITHOUT ADEQUATE SUPPORT." (Bank, Snidman & Pitts, p. 115)



"(FIRST), UTILIZATION MUST BE APPROACHED AS A PROCESS, NOT AN EVENT. THE PROCESS APPEARS TO OCCUR AT TWO LEVELS: INDIVIDUAL AND SYSTEMIC. EFFECTIVE DISSEMINATION APPROACHES ATTEND TO BOTH LEVELS." (Emrich and Peterson, p.2)



"NEARLY ALL STUDIES SHOW THAT TWO OR MORE YEARS ARE REQUIRED BEFORE ANY NEW PRACTICE OR PROCEDURE STABILIZES. THE FIRST YEAR IS USUALLY A PERIOD OF BECOMING FAMILIAR WITH THE MECHANICS--THE "WHAT, WHEN AND HOW." SUBSEQUENT YEARS INVOLVE INTERNALIZATION, ACCOMMODATION, REFINEMENT AND FURTHER DIFFUSION. THE PROCESS IS SLOW AND REQUIRES RATHER CONTINUOUS ATTENTION AND SUPPORT AT THE EARLY STAGES." (Emrich and Peterson, p. 5)

"THE TASKS OF THE LINKING AGENT AND THE FLEXIBILITY REQUIRED SUGGEST A PARALLEL WITH THE DEMANDS ON THE TEACHER WHOSE STUDENTS NEED TO LEARN DIFFERENT THINGS AND WHO LEARN IN DIFFERENT WAYS. IT APPEARS THAT WE ARE BEGINNING TO REALIZE THE COMPLEXITY OF BOTH OF THESE ROLES AND THE IMPORTANCE OF THE AVAILABILITY OF SUPPORTS FOR EFFECTIVE FUNCTIONING IN EACH." (Ward, p. 185)

What type of "linkage" will be most effective for current dissemination goals?

"THE PERSON WHO DESIRES TO INFLUENCE THE SCHOOLS AS AN AGENT OF CHANGE MUST HAVE ONE FOOT IN THE WORLD OF PRACTICE AND ONE IN THE WORLD OF R&D." (R. Lavin & Jean Sanders, p. 48)

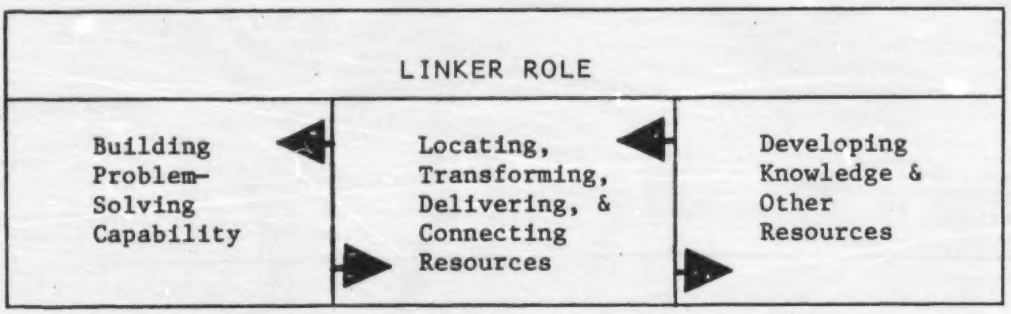
LINKAGE AND USE OF LINKING AGENTS (EXTERNAL AND/OR INTERNAL) IS A STRATEGY FOR DISSEMINATION AND SCHOOL IMPROVEMENT. THE STRATEGY HAS BEEN USED BY A VARIETY OF AGENCIES; AS A MODEL, IT VARIES CONCEPTUALLY AND OPERATIONALLY. ACCORDINGLY, THE BELMONT TASK FORCE AGREED UPON FOUR MAJOR CATEGORIES OF FUNCTIONS WHICH REASONABLY REFLECT CATEGORIES INCLUDED IN SEVERAL CONCEPTUALIZATIONS:

A. PROBLEM-SOLVING, PROCESS HELPING, AND SERVICES RELEVANT TO GENERAL ORGANIZATIONAL CAPACITY BUILDING.

B. RESOURCE FINDING SERVICES, INCLUDING PROVIDING INFORMATION AND LOCATING AND DELIVERING RESOURCES OF ALL KINDS.

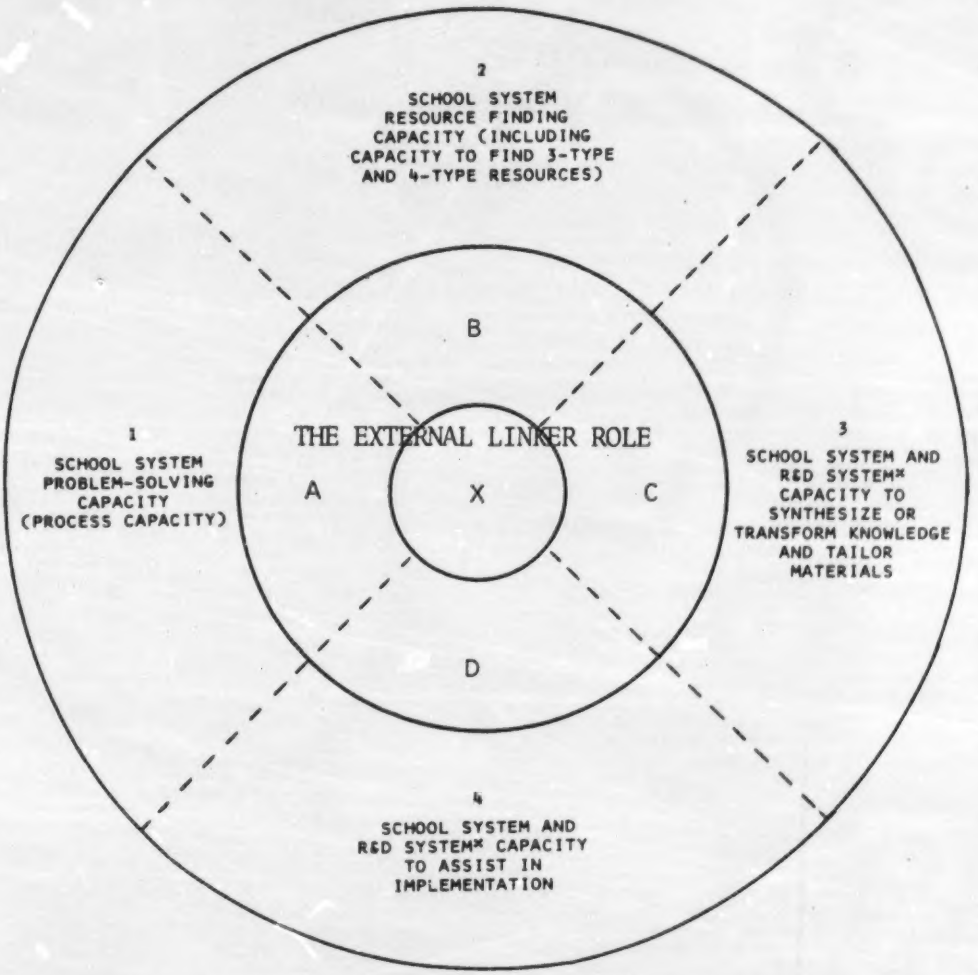
C. DEVELOPING AND TRANSFORMING KNOWLEDGE AND OTHER RESOURCES.

D. SUPPORT FOR THE IMPLEMENTATION OF NEW PRACTICES DERIVED FROM OR RELATED TO R&D KNOWLEDGE RESOURCES.


LINKER ROLE
Building Problem-Solving Capability
Locating, Transforming, Delivering, & Connecting Resources
Developing Knowledge & Other Resources

(Cates, Carolyn S. and Spencer Ward, eds., 1979.)

RELATIONSHIP OF EXTERNAL LINKER ROLE TO SCHOOL CAPACITY SYSTEM


2
SCHOOL SYSTEM RESOURCE FINDING CAPACITY (INCLUDING CAPACITY TO FIND 3-TYPE AND 4-TYPE RESOURCES)
B
THE EXTERNAL LINKER ROLE
A
X
C
D
1
SCHOOL SYSTEM PROBLEM-SOLVING CAPACITY (PROCESS CAPACITY)
3
SCHOOL SYSTEM AND R&D SYSTEM* CAPACITY TO SYNTHESIZE OR TRANSFORM KNOWLEDGE AND TAILOR MATERIALS
4
SCHOOL SYSTEM AND R&D SYSTEM* CAPACITY TO ASSIST IN IMPLEMENTATION

CATEGORIES OF LINKER FUNCTIONS:

A = Problem-Solving Services

B = Resource Finding Services

C = Knowledge and Product Transforming Services

D = Implementation Support Services

X = Basic Personal and Interpersonal Skills, Knowledge and Attitudes Related to Consultation & Relationship Building

*COMPONENTS OF R&D SYSTEM:

- Universities
- Developers
- Publishers
- Labs/Centers
- Private Agencies
- Private Consultants

(Ward, Spencer, 1979.)

"DIFFERENT WAYS OF VIEWING THE CHANGE PROCESS UNDERSCORE ITS COMPLEXITY. EDUCATORS NEED TO UNDERSTAND THE INNOVATIONS THEMSELVES, AS WELL AS THE CONTEXT AND PERSPECTIVES OF THOSE WHO WILL ULTIMATELY USE THE NEW IDEAS."

(Using Knowledge for School Improvement: A Guide for Educators. 1981.)

"TO UNDERTAKE CURRICULUM RETOOLING IS ALSO TO UNDERTAKE (AT A MINIMUM) STAFF DEVELOPMENT, EVALUATION DESIGN, BUDGET REALLOCATION, AND COMMUNITY RELATIONS. EVERY CHANGE AFFECTS THE TOTAL SYSTEM OF FUNCTIONS. HOWEVER, SERVICE ORGANIZATIONS SELDOM ADDRESS IMPROVEMENT NEEDS SYSTEMICALLY."
(Mojkowski, p. 67)

"KNOWLEDGE SOUGHT BY THE PRACTITIONER OFTEN IS NOT THE SAME AS THAT WHICH CAN BE PROVIDED BY THE RESEARCHERS. 'TRANSFORMATIONS' OF EXISTING KNOWLEDGE INTO USABLE RESOURCES MUST BE PROVIDED."
(IPOD, 1976, p. 37)

(Excerpts:)

USING KNOWLEDGE FOR SCHOOL IMPROVEMENT:

A GUIDE FOR EDUCATORS
(Far West 1981)

Ernest House, in "Three Perspectives on Innovation--The Technological, the Political, and the Cultural" (1980) describes three lenses through which change processes in the schools may be viewed. Each perspective has a different set of assumptions and orientations and emphasizes a different aspect of the change process.

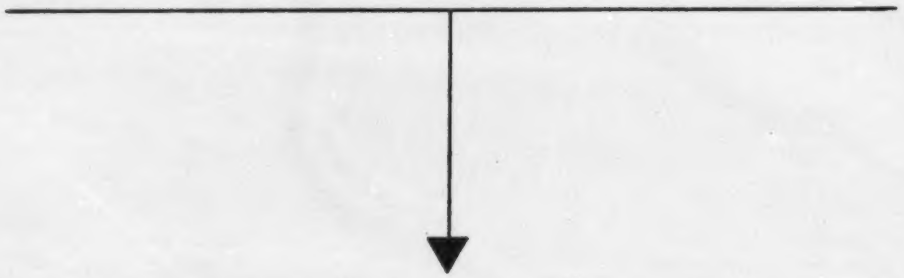
The Technological Perspective

The technological perspective emphasizes the development of new "things." People assume that if the products used by teachers are improved, instruction and learning will also improve. Not only is teaching itself considered to be primarily a technology, but the social and interpersonal aspects of teaching are often viewed mechanistically.

The technological perspective assumes that change is a process governed by reason and logic. Its proponents expect schools to define their goals and decide on the best means of achieving them. Once educational needs are defined, technical resources can then be provided to alleviate those needs. Innovation is, quite simply, a matter of identifying problems or goals, finding solutions or products that meet them, and placing these solutions or products in schools.

The research and development process provides the most promising means of creating technical products to improve schools. Through this process, researchers identify a need and then develop an innovative product to address the need. The technological perspective supposes that a high-quality, packaged innovation will work equally well in different educational contexts. Innovations proven effective in one location may be transferred to other situations, where they are "replicated." Innovative material remains the same throughout the whole process. Thus, the technological perspective assumes that the most efficient means to a given end is a well-developed product or package of materials or a fully replicable set of practices.

There are a number of implications and assumptions inherent in the technological viewpoint.



- School improvement is possible if the educational product is of high quality. Faculty, students, and educational contexts do not influence the effectiveness of the innovation. Because the material is used the same way in all schools, it needs no modification after it is developed.

- Change processes are predictable. Instruction and learning activities do not vary with the setting. The adoption of the innovation by one school will be quite similar to the adoption process in another school. Human behaviors that support innovation and improvement are relatively constant.

- Innovation lies more in the methods and materials than it does in the teacher. Since technology is at the center of school improvement, the significance of idiosyncratic teacher behavior is diminished.

- Organizational innovations are the result of a systematic, orderly process. Often new technologies such as word processing equipment or processes such as a programmed budgeting system are introduced into the organization with little consideration for their influence on the people who will be using them. The technological perspective assumes that the connections and interactions among all the people and elements in an organization are quantifiable, predictable, and controllable.

- The outcome of the innovation is determined by the characteristics of the technology. Factors such as student attitudes, teacher preferences, and the socioeconomic status of the community do not affect the implementation process.

- Because technical progress is a predominant goal, the major problem becomes a technical one: finding the best means to a given end. Thus, evaluation and research are based on hard facts used to judge effectiveness empirically.

In summary, the technological perspective emphasizes the adoption of rationally developed innovations. Knowledge is seen as technical and readily implemented by a technician. Both the change process and its outcomes are predictable and can be transferred across a variety of educational settings. Certainty and predictability prevail if the innovation is technically sound.

Does effective schooling R&D imply a technological perspective of change?

The Political Perspective

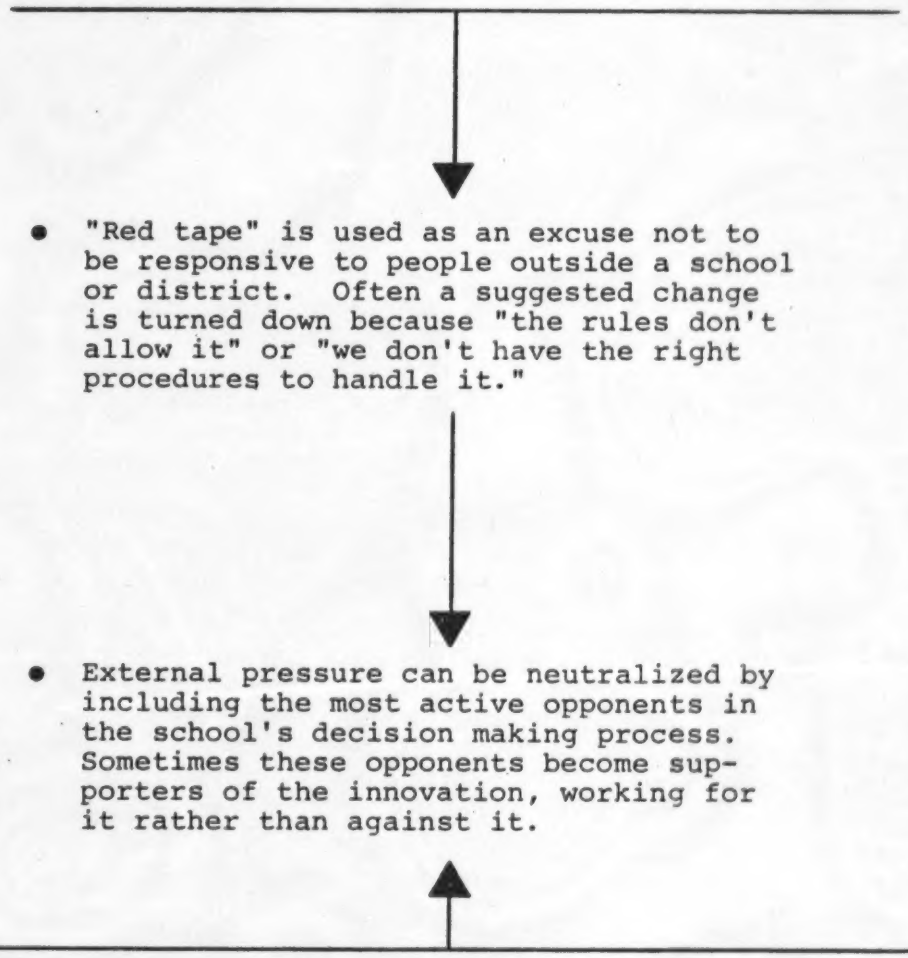
This view of innovation provides a look at the conflict, power struggles, and political bargaining that occur within schools. Schools are organizations with power structures and a hierarchy of authority. Power struggles, which flow from this system of authority, occur because individuals and groups compete for greater influence within the organization. The introduction of an innovation can also upset the balance of power. Changes carry with them implicit threats, suggesting a possible disruption in the existing power structure. Thus, innovation is sometimes resisted for political reasons.

The political perspective considers factional groups that are vying for power and influence in an organization. Such groups may be composed of teachers, administrators, parents, students, or professional associations. Conflicts may arise among these stakeholders as a result of educational change. Bargaining or negotiation may lead to a compromise that the conflicting parties will accept. Cooperation, then, is a result of negotiation rather than being an automatic condition in schools.

Probably everyone in education can pinpoint local political struggles similar to those described. Wherever people, groups, or organizations diverge in their special interests, conflict, negotiation, and compromise are likely to ensue. Cooperation does not always emerge, especially when an innovation affects the school's power structure.

Who should be concerned about the political implications of effective schooling R&D?

Other political issues may arise from the relationship between the school and the community it serves. Some schools interact frequently with their environment; others withdraw from it. Schools are, in one sense, owned by their environment. Supported totally by public dollars, they are vulnerable to citizen pressure. In order to reduce this vulnerability, schools may build barriers between themselves and outside influence groups. Sometimes these barriers serve a positive purpose, allowing schools to concentrate on the education of students. At other times the barriers lead to isolation and stagnation. Common ways that schools buffer themselves from their environment are these:



- "Red tape" is used as an excuse not to be responsive to people outside a school or district. Often a suggested change is turned down because "the rules don't allow it" or "we don't have the right procedures to handle it."

- External pressure can be neutralized by including the most active opponents in the school's decision making process. Sometimes these opponents become supporters of the innovation, working for it rather than against it.

- "Experts" can also be brought in to strengthen the school's posture toward the innovation. If the school wants to convince others that the change is either wise or wasteful, expert opinion can usually be found to support a predetermined position. Using outside testimony in this way can reduce the influence of lay opponents who lack comparable expertise, or of educators who lack expert stature or credibility.

Another way of applying the political perspective to schools is in analysis of the national, state, and local educational structure. Schools are part of a massive, complex system that is difficult to change. Schools must answer a host of political demands from agencies at all levels, which sometimes demand contradictory action by local educators. Regulations, paperwork, and other requirements imposed on schools sometimes become overwhelming. Yet local educators can rarely refuse to cooperate with other funding agencies and programs; they need the resources and support to survive.

To summarize, the political perspective focuses on the people, groups, and organizations that have a vested interest in educational innovation. These stakeholders are often in conflict with each other as to whose influence will prevail. Disagreements are commonly settled through bargaining and negotiation. Schools cannot ignore outside pressure, since their funding sources are public. But with an understanding of the political realities they face, schools can still innovate in ways that are compatible with existing group and community preferences.

The Cultural Perspective

Schools may be viewed as collections of people with shared meanings, values, norms, and codes of behavior. These accepted attitudes and assumptions about the culture of the school influence how people perceive and interpret new ideas or information. In addition, the school as an organization can shape the cultures within it, and at times, even force compliance.

Every culture has numerous subcultures, each of which may view innovation differently. Different groups tend to place their own values and meanings on an innovation, supporting it or opposing it according to their belief system and their experience. The cultural perspective suggests that educational change requires the interaction of separate subcultures, which may or may not be willing to cooperate. Group values vary, as do styles of resolving conflict. Ultimately the cultural context, composed of somewhat divergent subcultures, can be a source of planned and unplanned consequences that influence educational change. From the cultural perspective the results of innovative activity depend on how it is received by the subcultures involved, rather than on technology or political factors.

The cultural perspective acknowledges that the context into which a change is introduced can determine its success or failure. Schools are inhabited by insiders with unique points of view about what the culture of the school is or ought to be. Numerous different subcultures exist within schools, among them students, teachers, and administrators. Innovations that reinforce one or more subcultures are usually more positively received by their members than innovations that violate existing values and norms.

Sieber's discussion of incentives and disincentives inherent in educational innovation is pertinent then. Subcultures in the school may have varying predispositions to seek certain rewards and avoid certain costs.

Miles suggests that, depending on the issue and the school itself, the subcultures or groups that influence decision making can vary. The roles and activities of subcultures in the school vary considerable from one school to the next or from one issue to the next.

Common properties of schools cited by Miles also are significant in light of the cultural perspective. Schools tend not to be interdependent; rather, each building is relatively autonomous, acting independently of others in the district. Schools are owned and supported by their community. They need not compete extensively for resources with other schools in the district. This situation may reduce teacher and administrator incentives to innovate. Clearly, therefore, the subcultures in a school are influenced by various generic characteristics of schools.

- *NOTES* -

An obvious message from the cultural perspective that the process of innovation is adaptive. Change happens slowly because any new educational idea or methodology must be modified to be consistent with the culture of the school. Because teachers are the individuals most influenced by innovation, they expect to influence it in return. Those standing outside the culture of the school are unlikely to be sensitive to meanings and values shared by local participants. The innovations that policymakers mandate or researchers develop must be adpated to fit the culture of the school. The greater the need for adaptation, the more slowly change occurs.

The cultural perspective, then, focuses on the context of the innovation. It suggests that shared meanings and values of subcultures in the school predominate over the content of politics of the innovation in context. Innovation is seen as an adaptive process because the changes introduced must be made compatible with the culture of the school.

- *NOTES* -

Highlights of the Three Perspectives

- The technological perspective suggests that the process of innovation is logical, systematic, predictable, and controllable. Teaching is viewed in a technical frame as a mechanical activity. Schooling is a technique built on the notion that instructional activities add up sequentially to lead to student learning. Because of this certainty and rationality, innovations can be adopted intact from one school to the next.

- The political perspective emphasizes power struggles and bargaining among competing coalitions or interest groups. Change might be resisted because it challenges the existing power structure in the school. Resistance may also emerge if an interest group judges that an innovation will undermine its power or credibility. From the political perspective, the process of educational change is the result of negotiation between interest groups with divergent interests.

- The cultural perspective focuses on the values, norms, and shared meanings held by different subcultures in the school. These subcultures respond to an innovation in accord with the culture of the school and community and in terms of issues raised by the innovation. Even

within a subculture disagreements can arise. Sometimes individuals from various subcultures, such as faculty and central office staff, unite around a common cause rather than remaining within the boundaries of their single group. (pp. 3-11)

Does effective schooling R&D imply one perspective over the others?

How can the findings and conclusions presented in action research studies of dissemination, change and utilization be used to refine current activities? What key learnings should influence strategies for dissemination of effective schooling R&D?

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